ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)					February 2002			
BUDGET ACTIVITY 2 - Applied Research PROJECT 0602623A - JOINT SERVICE SMALL ARMS PROGRAM PROGRAM								
COST (In Thousands)		FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate
H21 JT SVC SA PROG (JSSAP)		5223	5560	5812	5891	6208	6411	6720

A. Mission Description and Budget Item Justification: This Program Element (PE) investigates and researches key individual and crew-served weapon technologies that will enable the Army Transformation to the Objective Force by enhancing the fighting capabilities and survivability of dismounted battlefield personnel of the Services. Funded efforts include component technologies for: the Objective Crew-Served Weapon (OCSW); the Objective Individual Combat Weapon (OICW) System Enhancements: Light Fighter Lethality; and Advanced Medium Machine Gun Technology. OCSW provides the next generation crew-served weapon with improved combat effectiveness. including bursting munitions technology to provide 500% + increase in probability of target incapacitation at extended range (to 2000m) with the capability to hit protected personnel targets in defilade (obscured or non-visible), and a 65-75% reduced weight over weapons it replaces. The OCSW is designed to replace selected M2 machine guns, MK19 grenade machine guns and M240 machine guns. The OICW System Enhancement efforts develop lethality-enhancing and cost-reducing technologies for OICW. The Light Fighter Lethality effort provides smart munition based weapon system technologies that will reduce dramatically warfighter system weight (25-50% weapon weight reduction), provide near 100% lethality, and maximize operational utility and survivability for the Objective Force. The Advanced Medium Machine Gun Technology effort provides technologies for a lighter, more effective and versatile replacement for current 7.62mm medium machine guns. The technology enhancement efforts of this PE will assure that the Objective Family of Small Arms (OFSA), the next generation of weapons systems, continues to overmatch the evolving threat and address the needs of the Objective Force. All Joint Service Small Arms Program (JSSAP) efforts are based upon the Joint Service Small Arms Master Plan (JSSAMP), Mission Needs Statements and Operational Requirements Documents of the Services. The cited work is consistent with the Army Science and Technology Master Plan (ASTMP), the Army Modernization Plan and Project Reliance. The program element contains no duplication with any effort within the Military Departments. This program is primarily managed by the U.S. Army Armament Research, Development and Engineering Center (ARDEC), Picatinny Arsenal, New Jersey. Work in this PE is related to, and fully coordinated with, efforts in PE 0602624A (Weapons and Munitions Technology), and PE 0603607A (Joint Service Small Arms Program). Transition paths have been established in coordination with Product Manager (PM) Small Arms, USMC Director Ground Weapons and US Special Operations Command (SOCOM). This program supports the Objective Force transition path of the Transformation Campaign Plan (TCP).

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BUDGET ACTIVITY 2 - Applied Research			PE NUMBER AND TITLE 0602623A - JOINT SERVICE SMALL ARMS PROGRAM PROGRAM PROJECT H21				
FY 20	01 Accom	plishments:					
•	2811						
	2011	- Evaluated OCSW gun launched (burst mode), fully functional, self destruct function); demonstrated Land Warrior interface and OCSW Advanced Technology Demonstration (ATD) technical	d thermal module interface of OCSW; conducted i				
	1415	self destruct function); demonstrated Land Warrior interface and	d thermal module interface of OCSW; conducted i and troop testing. gn, employing Micro Energetic Initiation (MEI) for	nitial planning and preparations for or OICW System Enhancement to confirm			
		self destruct function); demonstrated Land Warrior interface and OCSW Advanced Technology Demonstration (ATD) technical - Tested and evaluated breadboard MEMS safe and arming designation of the control	d thermal module interface of OCSW; conducted i and troop testing. gn, employing Micro Energetic Initiation (MEI) fo on for technology insertion to OICW development	nitial planning and preparations for or OICW System Enhancement to confirm.			
· Γotal	1415	self destruct function); demonstrated Land Warrior interface and OCSW Advanced Technology Demonstration (ATD) technical - Tested and evaluated breadboard MEMS safe and arming design feasibility of reduced fuze cost, weight and volume in preparation	d thermal module interface of OCSW; conducted i and troop testing. gn, employing Micro Energetic Initiation (MEI) fo on for technology insertion to OICW development	nitial planning and preparations for or OICW System Enhancement to confirm.			
	1415 997 5223	self destruct function); demonstrated Land Warrior interface and OCSW Advanced Technology Demonstration (ATD) technical - Tested and evaluated breadboard MEMS safe and arming designed feasibility of reduced fuze cost, weight and volume in preparation and the conceptualized preliminary individual system designs address	d thermal module interface of OCSW; conducted i and troop testing. gn, employing Micro Energetic Initiation (MEI) fo on for technology insertion to OICW development	nitial planning and preparations for or OICW System Enhancement to confirm.			
Γοtal FY 20	1415 997 5223	self destruct function); demonstrated Land Warrior interface and OCSW Advanced Technology Demonstration (ATD) technical - Tested and evaluated breadboard MEMS safe and arming design feasibility of reduced fuze cost, weight and volume in preparation	d thermal module interface of OCSW; conducted is and troop testing. gn, employing Micro Energetic Initiation (MEI) for on for technology insertion to OICW development sing substantial lethality increases for Light Fighter	nitial planning and preparations for or OICW System Enhancement to confirm. r Lethality.			

FY 2003 Planned Program

- Complete design and build of Light Fighter Lethality course correcting seeker projectile for potential advances in lethality.
- Test and evaluate Light Fighter Lethality course correcting seeker projectile performance for improved hit probability and target effects.
- 1373 Conduct Early Operational Assessment/User testing of OCSW.
- 1022 Conduct initial secondary armament interface effort in support of Future Combat System.

Total 5812

Total 5560

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BUDGET ACTIVITY 2 - Applied Research	PE NUMBER AND TITLE 0602623A - JOINT SERVICE SMALI PROGRAM	PROJECT H21		

B. Program Change Summary	FY 20	001	FY 2002	FY 2003
Previous President's Budget (FY2002 PB)	4	5365	5611	5775
Appropriated Value	4	5415	5611	0
Adjustments to Appropriated Value		0	0	0
a. Congressional General Reductions		0	-51	0
b. SBIR / STTR		-142	0	0
c. Omnibus or Other Above Threshold Reduction		0	0	0
d. Below Threshold Reprogramming		0	0	0
e. Rescissions		-50	0	0
Adjustments to Budget Years Since FY2002 PB		0	0	37
Current Budget Submit (FY 2003 PB)	4	5223	5560	5812